Claims listing:

1. (currently amended) A body fluid sampling system for use on a tissue site, the system comprising:

a disposable;

a penetrating member driver;

a plurality of penetrating members arranged in a radial configuration [[on]] in the disposable wherein sharpened distal tips of the penetrating members point radially outward;

wherein an active one of said penetrating members may be operatively coupled to said penetrating member driver, said penetrating member driver moving said active one along a path out of a housing having a penetrating member exit, into said tissue site, stopping in said tissue site, and withdrawing out of said tissue site; [[and]]

a processor coupled to the penetrating member driving configured to provide instructions for a fast-into of penetrating members into a tissue site and slow-out velocity out of the tissue site; and

a plurality of analyte detecting members positioned in the disposable, wherein at least one of said analyte detecting members is positioned to receive fluid from a wound created by said active one of said penetrating members, wherein said detecting members are not pierced by the active one of the penetrating members.

2. – 12. (cancelled)

13. (currently amended) A system as in claim 1 further comprising a penetrating member sensor positioned to monitor [[a]] the active one of said penetrating members coupled to said penetrating member driver, the penetrating member sensor configured to provide information relative to a depth of penetration of a penetrating member through a skin surface.

14. (original) The system of claim 13, wherein the depth of penetration is about 100 to 2500 microns.

15. (original) The system of claim 13, wherein the depth of penetration is 500 to 750 microns.

16. (original) The system of claim 13, wherein the depth of penetration is no more than about 1000 microns beyond a stratum corneum thickness of a skin surface.

17. (original) The system of claim 13, wherein the depth of penetration is no more than about 500 microns beyond a stratum corneum thickness of a skin surface.

18. – 20. (cancelled).

21. (currently amended) The system of claim 1, wherein the penetrating member driver is selected from one of the following: a voice coil, a rotary voice coil, a solenoid, a motor and gear box, a nanomuscle, or a combination of any of the above.

22. – 23. (cancelled).

24. (currently amended) The system of claim [22] 1, wherein the processor is utilized to monitor position and speed of [[a]] the active one of said penetrating members as the penetrating member moves in a first direction.

25. – 26. (cancelled).

27. (currently amended) The system of claim [22] 1, wherein the processor is utilized to monitor position and speed of [[a]] the active one of said penetrating members as the active one of said penetrating members moves in the first direction toward a target tissue, wherein the application of a launching force to the penetrating member is controlled based on position and speed of the penetrating member.

28. – 56. (cancelled).

57. (currently amended) The system of claim 1, wherein ~~each penetrating member~~ each of the plurality of penetrating members is an elongate member without molded attachments.

58. – 64. (cancelled).

65. (currently amended) A body fluid sampling system for use on a tissue site, the system comprising:

a disposable;

a penetrating member driver;

a plurality of penetrating members arranged in a radial configuration [on] in the disposable wherein sharpened distal tips of the penetrating members point radially outward;

wherein an active one of said penetrating members may be operatively coupled to said penetrating member driver, said penetrating member driver moving said active one along a path out of a housing having a penetrating member exit, into said tissue site, stopping in said tissue site, and withdrawing out of said tissue site; [and]

a processor coupled to the penetrating member driving configured to provide instructions for a fast-into of penetrating members into a tissue site and slow-out velocity out of the tissue site;

a plurality of analyte detecting members positioned in the disposable, wherein at least one of said analyte detecting members is positioned to receive fluid from a wound created by said active one of said penetrating members, wherein said detecting members are not pierced by the active one of the penetrating members; and

a coupler on said penetrating member driver configured to engage at least a portion of said elongate portion of the penetrating member and drive said member along a path into [[a]] the tissue site and withdrawn from [[a]] the tissue site.

a processor coupled to the penetrating member driving configured to provide instructions for a fast-into of penetrating members into a tissue site and slow-out velocity out of the tissue site; and

66. – 67. (cancelled).